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# Transnational Telecommunications Patents and Legislative Jurisdiction

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# Transnational Telecommunications Patents and Legislative Jurisdiction

*Cameron Hutchison\* and Moin Yahya\*\**

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The recent Court of Appeals, Federal Circuit (CAFC) decision in *NTP, Inc. v. Research in Motion, Ltd.*, (hereinafter the *BlackBerry* decision)<sup>1</sup> ushered in a new era of jurisdictional uncertainty concerning transnational patent disputes. The court's standard of "control and beneficial use" for infringement purposes, with respect to a telecommunications system with components located in both Canada and the U.S., leaves the jurisdictional reach of U.S. patent law open-ended. In the wake of the decision, different approaches have been discussed but none seem entirely satisfactory from the perspectives of fairness, predictability, and consistency with international patent law. In this short paper, we propose that these objectives may best be achieved if states use a principle of territorial market rights to determine legislative jurisdiction applicable to transnational telecommunications patent disputes. This approach would guide courts in applying national patent law according to where territorial market rights in an invention have been exploited.

Part I will discuss the *BlackBerry* case and other kinds of transnational telecommunications patent disputes (i.e. the Internet) that might arise. Part II will critique the court's application of legislative jurisdiction in the *BlackBerry* case, as well as alternative approaches that have been advanced in the literature.

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1. *NTP, Inc. v. Research in Motion, Ltd.*, 418 F.3d 1282-1326 Fed. Cir. 2005) [hereinafter *NTP v. RIM*].

Part III will advance our proposal, arguing that a principle of territorial market rights achieves fairness and predictability, as well as consistency with international patent law.

## I. TRANSNATIONAL TELECOMMUNICATIONS PATENT DISPUTES

### A. *NTP v. RIM*

In *NTP v. RIM*, plaintiff Network Technology Partners (NTP) successfully sued defendant Research in Motion (RIM) for patent infringement in regards to the latter's famous BlackBerry system. The BlackBerry system allows out-of-office users to receive and send e-mails through a hand-held device. The following basic units comprise the BlackBerry network: (1) the handheld terminal (pager); (2) the e-mail redirector software (such as the BlackBerry Enterprise Server); and (3) access to a nationwide wireless network.<sup>2</sup> Essentially, the BlackBerry system routes e-mail messages received in a personal computer account to the user's handheld device, without a user-initiated connection.<sup>3</sup> The e-mail redirector software sends an email message from a personal computer to the BlackBerry Relay via the Internet. The Relay routes the message to a partner wireless network, which then delivers the message to the BlackBerry handheld.<sup>4</sup> The user is notified virtually instantly of new e-mail messages.<sup>5</sup> RIM's system also permits users to send email messages over the wireless network from their handhelds.<sup>6</sup>

The BlackBerry system is, to a certain extent, similar to the U.S. patents held by the plaintiff NTP, which disclosed a method for receiving electronic mail via wireless systems.<sup>7</sup> As opposed to the BlackBerry system, however, the NTP patents do not provide for a method to compose and send messages from the receiver.<sup>8</sup> The CAFC nonetheless found that RIM's BlackBerry system infringed the claims of NTP's patents.

The facts in *NTP v. RIM* present an interesting challenge to the reach of U.S. patent law. Within the United States, the Canadian-based RIM sold the handheld devices as well as supplied the software (e.g. Blackberry Enterprise) that redirected messages from the server account to the Relay station. RIM also operated the Relay station located in Canada, which provided the connection or "critical interface" between the e-mail system and radio frequency (RF) transmission network. RF networks, however, were neither owned nor operated by RIM.

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2. *Id.* at 1289.

3. *Id.* at 1287.

4. *Id.*

5. *Id.*

6. *Id.* at 1290.

7. *NTP, Inc. v. Research in Motion, Ltd.*, 261 F. Supp.2d 423, 426 \*E.D.Va. 2002).

8. *NTP v. RIM*, 418 F.3d 1282, 1288.

U.S. patent law is explicitly territorial in jurisdictional scope. Section 271(a), under which RIM was ultimately found liable for patent infringement, states:

“Except as otherwise provided in this title, whoever without authority makes, uses, offers to sell, or sells any patented invention, *within the United States*, or imports into the United States any patented invention during the term of the patent therefor, infringes the patent.”<sup>9</sup>

The CAFC acknowledged the limited territorial scope of this provision, but noted the “added degree of complexity” with respect to components located in various places whose function and uses are separate from their physical location.<sup>10</sup> RIM relied on precedent that, in its view, suggested that the “control point” of the wireless system was the Relay located in Canada and thus, there could be no infringement of U.S. patent law.<sup>11</sup> However, the court responded by referencing the *Decca* decision, a case that involved a telecommunications system where one of the components (a transmitting station) was located in Norway. In *Decca*, the court found that “ownership of the equipment by the United States, the control of the equipment from the United States and . . . the actual beneficial use of the system within the United States” justified application of U.S. law.<sup>12</sup> The CAFC suggested this as a “legal framework” for analyzing this case.<sup>13</sup>

The CAFC distinguished between NTP’s method and system patents for the purposes of infringement. In respect to the *method* patent, the court agreed with RIM that a finding of direct infringement by RIM’s customers under § 271(a) was precluded by the location of RIM’s Relay in Canada.<sup>14</sup> RIM did not fare as well in respect of the *system* patents in issue. Here, the court applied a “control and beneficial use” standard which brought infringement under U.S. patent law. The court began by interpreting “use” in § 271(1)(a) broadly to mean “put into

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9. 35 U.S.C. § 271(a) (2005) (emphasis added).

10. NTP v. RIM, 418 F.3d 1282, 1313.

11. See Yar Chaikovsky & Adrian Percer, *Globalization, Technology without Boundaries & the Scope of U.S. Patent Law*, 9 INTELL. PROP. L. BULL. 95, 97 (2004). RIM argued that the relay station was the ‘control point’ of the wireless Blackberry system and since this was located in Canada, § 271(a) was not violated. RIM suggested that U.S. precedent supported this argument. For example, in *Hughes Aircraft v. United States*, the then Court of Claims denied infringement of a U.S. patent for an altitude controller used in a spacecraft that was being controlled in England, but where tracking and data acquisition occurred in the United States (the “control point” located in England). 215 U.S.P.Q. (BNA) 787, 812 (1982). In *Freedom Wireless v. Boston Communications Group*, cellular calls that originated and terminated in Canada (but where pre-paid services were administered in the U.S.) were held to have their control point in the “network of mobile switching offices in Canada”.

12. NTP v. RIM, 418 F.3d 1282, 1316. The court recognized the different legal context in which this case appeared, but noted that it provided a legal framework for analyzing the present case.

13. *Id.*

14. *Id.* at 1319.

action or service.”<sup>15</sup> Applying this interpretation of use to the facts at hand, the Court stated:

The use of the claimed system under section 271(1)(a) is the place at which the system as a whole is put into service, i.e. where control of the system is exercised and beneficial use of the system obtained.<sup>16</sup>

Thus, the court seemed to declare a requirement of control *and* beneficial use of the system *within the United States* to bring infringement within the scope of “use” in § 271(1)(a).<sup>17</sup>

The CAFC appears to have adopted a modified version of the *Decca* test for use under § 271(1)(a). Instead of the *ownership, control and beneficial use* tripartite as per *Decca*, the court applied only the latter two requirements. Problems associated with this new test of legislative jurisdiction in telecommunications patent disputes will be discussed in a later section.

### B. *The Internet*

One might expect that similar types of jurisdictional questions would arise in connection with patented inventions that may be accessed or infringed from points abroad through the Internet. The most likely candidate here is patented software that may be used for such things as electronic commerce.<sup>18</sup> Suppose, for example, that a U.S. patent holder of software which teaches a method of online commerce (e.g. one-click shopping) finds that a French e-commerce enterprise is infringing its patent while conducting business with U.S. customers. One may consider the case where a user, located outside the U.S., employs software patented in the United States to communicate with a computer that is located in the United States. Should U.S. patent law apply to these types of situations?

As distinct from BlackBerry-type systems, where the corporate infringer engages known components for the operation of the system, infringement through the Internet can often be unintentional even by sophisticated users.<sup>19</sup>

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15. *Id.* at 1317.

16. *Id.*

17. *Id.* Later, however, the court indicated that “the location of the use of the communications system as a whole occurs in the United States”, thus satisfying the situs of use for the purposes of § 271(a).

18. This article leaves aside the technical argument that software is a process. For an interesting discussion on that point, see Dan L. Burk, *Patents in Cyberspace: Territoriality and Infringement on Global Computer Networks*, 68 TUL. L. REV. 1, 28 (1993) in which case all elements of the process would need to occur in the United States, according to the reasoning by the CAFC in *NTP v. RIM*.

19. *Id.* at 40 (“The simple act of logging onto the network may initiate the running of infringing software at some remote site; sending or receiving messages or accessing a remote computer may initiate more infringing activity of which the computer operator may be unaware. Even if the operator is aware, or suspects, that his network use has initiated infringing software activity, it may not be within his control to halt or bypass the activity—packet routing and other network functions may proceed automatically through avenues not of his choice.”)

Thus, there are grounds for treating Internet-based infringement differently from other types of telecommunications patent infringement actions. The wisdom of such a differentiated approach will be discussed in a later section.

## II. ALTERNATIVE APPROACHES TO LEGISLATIVE JURISDICTION

As stated earlier, the Patent Code is explicitly territorial in scope. As the *BlackBerry* case demonstrates, this territorial limitation is not terribly helpful for transnational telecommunications disputes involving a foreign element. U.S. courts have struggled with territorial scope in these situations, and the resulting tests are unsatisfactory.<sup>20</sup>

### A. Ownership, Control and/or Beneficial Use

Prior to *NTP v. RIM*, courts applied different tests for telecommunications patent infringements involving a foreign element. In one line of cases, a “control point” or “master station” analysis was employed. Thus, in *Hughes Aircraft*, where patented technology that was part of a satellite being controlled from the UK, but where tracking and data acquisition occurred in the United States, the court found that the “control point” or “master station” was in the UK and thus extraterritorial. Thus, U.S. patent law did not apply.<sup>21</sup>

With respect to modern telecommunications systems, such as the *BlackBerry*, or the Internet in general, it is difficult to identify a system’s control point. In the *BlackBerry* case, for example, one struggles to identify which component corresponds to the control point. Was it the relay station (i.e. the “critical interface”) in Canada? Or was it the operation of the handheld device in the United States? And if it was the latter (as the court seems to suggest), how is this different from “beneficial use?”

In *NTP v. RIM* however, both a control *and* beneficial use approach was adopted, regrettably without much elaboration. The exact scope of this test remains uncertain. For example, if I access my friend’s BlackBerry in the U.S. because she wants me to monitor her e-mail messages while she is visiting a country where her BlackBerry won’t work, I would arguably be controlling the technology in the United States, but the beneficial use is for my friend located outside the country. Would this be an infringement under a test requiring both control *and* beneficial use? Should it be infringement? Commentators have noted that the failure of the court to adequately explain or articulate a theory of control

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20. The unstated approach of expansive jurisdictional scope as applied to transnational patents may be the protection of U.S. innovation industries. Daniel P. Homiller, *From DeepSouth to the Great White North: The Extraterritorial Reach of United States Patent Law After Research in Motion*, 17 DUKE L. & TECH. REV. (2005) at ¶ 30.

21. Chaikovsky & Percer, *supra* note 11, at 97.

and beneficial use will cause confusion.<sup>22</sup> Furthermore, beneficial use, without limitation, may be too expansive a reach of U.S. patent law. For example, suppose an individual purchases software in Canada and uses that software on her computer while in the United States. Under a beneficial use approach, that individual would be liable for infringement under U.S. patent law even though the software was purchased in another country.

The court in *Decca* adopted an *ownership, control and beneficial use* test, though it is unclear whether adding a requirement of ownership adds any coherence to the territorial infringement analysis. To illustrate the point, if I am using my friend's BlackBerry to monitor my e-mail messages that I have asked others to send to her account for my benefit, it seems rather arbitrary to find there is no infringement when I have controlled and received benefit from the infringing device, though technically I do not own it.

In our view, the above tests lack coherence because they attempt to correlate the terminology of use with ownership, control and/or beneficial use within U.S. territory. While ostensibly this connection appears meaningful, one sees that these tests may, in certain fact situations, appear arbitrary. This is because the starting framework is wrong. As we will show in the next section, the true meaningful connection between infringement and jurisdictional scope is territorial market rights.

### B. Location of the Patentably Distinct Component

One commentator has offered an alternative basis for determining the territorial scope of patent law, i.e., to connect jurisdiction with the location of the infringing component of the system. In *NTP v. RIM*, for example, the "patentably distinct" component of NTP's patents was the interface switch which was embodied in the Canadian-based Relay station.<sup>23</sup> Thus, since the patentably distinct component of NTP's patents was situated at the Relay station in Canada, U.S. patent law could not apply under this approach.<sup>24</sup> If NTP (or the original inventors) wanted to obtain patent protection under this rule, they would have had to file in Canada and every jurisdiction where they feared infringement might occur. While sensible in theory, this approach is impractical. As applied to telecommunications and computer networks, this idea may prove unwieldy. Companies would need to engage in massive expenditures to ensure global

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22. Homiller, *supra* note 20. In connection with the Federal Circuit's ruling, I would argue the same point is valid in connection with the Court of Appeals' ruling.

23. John W. Osborne, *A Rational Analytical Boundary for Determining Infringement by Extra-territorially-Distributed Systems*, 46 IDEA: INTELL. PROP. L. REV. 587, 603 (2006).

24. There is some doctrinal support for this approach. In *DeepSouth Packing Co. v. Laitram Corp.*, 406 U.S. 518 (1972), the Supreme Court suggested that expanding territorial application was a matter for Congress failing which, an inventor should seek patent protection "abroad through patents secured in countries where his goods are being used": Bridget A. O'Leary Smith, *NTP Inc. v. Research in Motion Ltd: Losing Control and Finding the Locus of Infringing Use*, 46 JURIMETRICS J. 347, 440-41 (2006).

protection of their inventions by filing patents in every country.<sup>25</sup> Thus, while the “patentably distinct” test creates a predictable rule, it is unfair to patent holders who would be burdened with expensive patent applications in numerous countries.

### III. PROPOSAL: PROTECTING TERRITORIAL MARKET RIGHTS

#### A. *Predictability and Fairness*

From a business perspective, the current system of uncertain jurisdictional rules leads to problems of unpredictability and unfairness. In the absence of certainty about the reach of a nation’s patent law, it may be impossible for a business to know if it is committing an act of infringement. An *ex post facto* finding of infringement in these circumstances would be unfair since the party will not have had fair warning of the potential for infringement. Thus, “parties in their dealings with foreigners are unable to know with certainty what laws will be applied to their transactions in the event of litigation. . . a system that fails to give parties adequate notice of the laws with which they must comply is also unfair.”<sup>26</sup> The possibility of concurrent or overlapping legislative jurisdiction, where two or more countries’ patent laws apply to a single infringement, also presents problems. Concurrent legislative jurisdiction can lead to greater expense for the parties<sup>27</sup> who may be exposed to the patent laws of many countries in respect to a single act of infringement. Furthermore, overlapping legislative jurisdiction may have unforeseen results, multiple liabilities, judgments commanding inconsistent behavior, and the imposition of one country’s innovation policies onto another state.<sup>28</sup>

Predictability and certainty for patent holders and technology users is of prime importance for establishing a principle of legislative jurisdiction. Where overlapping jurisdiction is unavoidable, fairness considerations should ensure that any potential liability is limited to actual harm suffered to a patent holder. In other words, an infringer should not, cumulatively speaking, be held liable for an amount in excess of the total loss experienced by a patent holder regardless of the jurisdictional question. Often, predictability will result in a measure of fairness, though the two do not always happily coincide. In the above discussion of the patentably distinct test, we saw an example of a predictable rule, (equating

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25. Smith, *supra* note 24, at 452.

26. *Id.* at 468; ANDREW L. STRAUSS, “Beyond National Law: The Neglected Role of the International Law of Personal Jurisdiction in Domestic Courts, in JURISDICTION IN INTERNATIONAL LAW 423, 468 (W. Michael Reisman ed., 1999).

27. *Id.* at 419.

28. Rochelle Dreyfuss, *The ALI Principles on Transnational Intellectual Property Disputes: Why Invite Conflicts*, 30 BROOK. J. INT’L L. 819, 840-41 (2004-05). Having said as much, the author claims that some patent claims contemplate activity in more than one location; without extra-territorial application of national laws, liability may not attach to offshore infringement.



territoriality with the location of the patentably distinct component) that placed an unfair burden on a holder to protect her patent from locating offshore in order to avoid infringement liability.

*B. The International Legal Regime for Patent Protection*

To this point, one might make two conclusions: first, that patent law is territorial and second, determining territoriality can be difficult and controversial. We might, therefore, benefit from uncovering the essence of territoriality that international law—and international patent law in particular—seeks to protect. The territoriality principle of national patent law is ultimately rooted in the principle of state sovereignty.<sup>29</sup> Since states at international law are sovereign equals, “jurisdiction implies respect for the corresponding rights of other states.”<sup>30</sup> As Sir Gerald Fitzmaurice stated in *Barcelona Traction*, international law places limits on state discretion in exercising jurisdiction including “. . . an obligation to exercise moderation and restraint as to the extent of the jurisdiction assumed by the courts in cases having a foreign element, and to avoid undue encroachment on a jurisdiction more properly appertaining to, or more appropriately exercisable by, another State.”<sup>31</sup>

International law scholars characterize jurisdictional issues involving foreign elements in the following way: executive, i.e. the power of a State to perform acts in another State’s territory, judicial, i.e. power of a national court to try a case involving a foreign element, and prescriptive or legislative, i.e. state power to apply laws involving a foreign element.<sup>32</sup> Legislative jurisdiction need not coincide with judicial jurisdiction. Thus a court with judicial jurisdiction may apply foreign laws.<sup>33</sup> The concern of this paper is with devising a principle for determining prescriptive (legislation) jurisdiction.

International treaties on patent law—notably the *WTO Trade Related Aspects of Intellectual Property* (TRIPS)—establish a territorial regime of patent protection. The TRIPS Agreement sets minimum standards of patent protection in WTO Member countries [Members], including:

- Exclusive patent rights with respect to making, using, selling or importing of the technology (Art. 28).
- 20-year term of protection from patent filing date (Art. 33).

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29. F.A. MANN, *The Doctrine of International Jurisdiction Revisited After Twenty Years*, in JURISDICTION IN INTERNATIONAL LAW, *supra* note 26 at 140; author also cites the principle of non-intervention, which he seems to suggest is the same thing.

30. *Id.* at 20.

31. *Id.* at 26-27.

32. See e.g. MICHAEL AKEHURST, *Jurisdiction in International Law*, in JURISDICTION IN INTERNATIONAL LAW, *supra* note 26.

33. *Id.* at 179.

- Patents to be provided without discrimination as to place of invention, field of technology or whether imported or locally produced (Art. 27).
- National treatment such that patent protection of non-nationals is to be no less favorable than for nationals (Art. 3).

These provisions mean that Members are obliged to grant a 20-year monopoly right to all patent holders and are prevented from affording preferential treatment to domestic applicants. Furthermore, the regime does not offer an “international patent” but clearly establishes a file per country system. That is, if a patent holder wishes to protect her invention in foreign countries, she must file a separate patent application in each of those countries.<sup>34</sup> The converse is also true. A business using innovative technologies in a foreign jurisdiction must conduct a patent search (and if applicable, negotiate a license) prior to setting up operations involving the patented technology.

The territorial aspect of TRIPS is underscored by the treaty’s treatment of market rights. Under TRIPS, a patent holder is given territorial market rights in the patent in each jurisdiction in which it files a patent.<sup>35</sup> TRIPS allows members to set rules of national or international exhaustion as they see fit.<sup>36</sup> Exhaustion “defines the territorial rights of intellectual property owners after the first sale of their protected products.”<sup>37</sup> A rule of national exhaustion permits a patent holder of one country to prevent the parallel importation from the owner or authorized dealer of the same patented product of another country;<sup>38</sup> in other words, national exhaustion preserves a patent holder’s right of importation of the technology. For this reason, TRIPS does not provide for a right of export since this would violate regimes of national exhaustion. Most developed countries have regimes of national exhaustion thus protecting these lucrative markets from parallel importation.

Concepts of importation and exportation pertain to trade in goods and services and could only apply in a strained sense to telecommunications where the act of infringement occurs in a single transaction which activates components in multiple jurisdictions. However, the framework of the TRIPS Agreement

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34. Although the *Patent Cooperation Treaty* facilitates patent registration in other countries.

35. That is, exclusive patent rights with respect to making, using, selling or importing of the technology. WORLD TRADE ORGANIZATION, TRADE RELATED ASPECTS OF INTELLECTUAL PROPERTY RIGHTS AGREEMENT, art. 28, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, THE LEGAL TEXTS: THE RESULTS OF THE URUGUAY ROUND OF MULTILATERAL TRADE NEGOTIATIONS 320 (1999), 1869 U.N.T.S. 299, 33 I.L.M. 81 (1994) [hereinafter TRIPS Agreements].

36. *Id.* at art. 6.

37. CARSTEN FINK, *Entering the Jungle of Intellectual Property Rights Exhaustion and Parallel Importation*, in INTELLECTUAL PROPERTY AND DEVELOPMENT: LESSONS FROM RECENT ECONOMIC RESEARCH 171 (Carsten Fink & Keith E. Maskus eds., 2005).

38. *Id.* Under a rule of international exhaustion, parallel imports of the product are allowed upon first sale of the product regardless of where it occurs.

emphasizes that what is truly important about intellectual property rights protection is the domestic market associated with those rights.

### *C. Proposal*

Considerations of predictability and fairness are an important starting point for developing a jurisdictional principle for transnational patent disputes. The next step is to determine what, in essence, the international patent regime seeks to protect through a principle of territoriality. Territoriality may correspond to the actual location of the patentably distinct component, though such a rule would create considerable expense for patent holders to register in every country to prevent avoidance through offshore exploitation of the patent. Alternatively, territoriality could apply to the control point or end use of the technology. However, such tests have shown themselves to be uncertain or open-ended. The best approach to assess territoriality is through the lens of market rights.

The TRIPS regime creates a file per country system of patent protection. Within each country, moreover, TRIPS protects the market rights of the patent holder through exclusive rights and the prevention against parallel imports (if a country chooses a regime of national exhaustion). The regime, in other words, seeks to protect the patent holder's market rights within each market where a patent is registered. Infringement of these market rights can best be determined if courts ask themselves the following question: has the patent holder been deprived of commercial gain either directly or indirectly within the territorial boundaries of the relevant market, e.g. sale to consumers in that market?

Basing territoriality on preserving the market rights of a patent holder within markets associated with a patent grant would seem to be the most appropriate principle of jurisdictional reach for the following reasons. First, it corresponds to the TRIPS regime. Second, protection of market rights is what patent holders are ultimately interested in preserving. Third, determining whether market rights have been exploited is relatively easy to ascertain. Fourth, preserving market rights also maintains the incentive to invest in research and development (and disclose), thus reinforcing the rationales of patent protection. Fifth, it offers predictability and fairness for patentees and technology users alike, both as a hard and fast rule, and also in terms of the onus placed on these stakeholders of the patent system regarding who must file a patent or conduct a patent search in the subject country. Sixth, if all states followed this rule, the possibility of overlapping jurisdiction and overlapping damages being imposed on infringers would markedly decrease.

The territorial market rights principle provides guidance in resolving the jurisdictional controversies that have been discussed in this paper. In *NTP v. RIM*, the marketing of devices and software to U.S. consumers by RIM, under this approach, is a clear deprivation of commercial rights associated with the NTP patents granted in the U.S. In other words, RIM should have negotiated a license prior to selling its products in that market. The territorial nexus for patent

law, therefore, is whether commercial rights associated with an invention are being exploited within a particular market.

The situation is more complex in connection with the infringement of software patents through the Internet. As mentioned earlier, innocent infringement of software patents is entirely possible through computer network exchanges on the Internet. For example, a French company that sells products online may use software that is not patentable in France, but through e-commerce with U.S. customers, may infringe a software patent registered in the United States. Should the French business be held liable under U.S. patent law? There has been much discussion as to whether, and under what circumstances, Internet postings or transactions that potentially infringe trademark should subject an infringer to personal jurisdiction in the receiving state. Tests developed in these cases have distinguished between “active” and “passive” websites,<sup>39</sup> or some version of an “effects-based” approach.<sup>40</sup> Others have commented that a foreseeability test might be the most appropriate balance between the harshness of an effects-based rule and the uncertainty of the active/passive distinction.<sup>41</sup>

While we may speculate that unintentional software patent infringement occurs, the paucity of actual cases does not justify deviation from the ordinary rule of strict liability for patent infringement, at least with respect to legislative jurisdiction. In the meantime, rules relating to personal and enforcement jurisdiction<sup>42</sup> should limit the harshness of this rule, i.e. strict liability under the Act, does not mean that a court will assert personal jurisdiction over a defendant or that its judgment would be enforced.

In sum, states should be guided by the following principle when determining the jurisdictional reach of their patent legislation: “States should apply their patent law to infringement cases involving a foreign element to the extent that market rights pursuant to a patent grant have been commercially exploited, either directly or indirectly, within that state.”

#### *D. Making It Happen*

This proposal could best be implemented by an international treaty on patent (or intellectual property) jurisdiction. Alternatively, courts may individually and on a collective basis through judicial dialogue, help create more uniform and predictable rules on jurisdiction by adopting a principle of territorial market

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39. *Zippo Mfg. Co. v. Zippo Dot Com Inc.*, 952 F. Supp. 1119 (W.D. Pa 1997).

40. *Nissan Motor Co. v. Nissan Computer Corporation*, 89 F. Supp. 2d 1154 (C.D. Cal. 2000).

41. MICHAEL GEIST, *INTERNET LAW IN CANADA* 67–70 (3d ed. 2002).

42. Jack L. Goldsmith, *Against Cyberanarchy*, 65 U. CHI. L. REV. 1199, 1216 (1998), noting that courts usually require “something more” than mere posting of information on the web to engage personal jurisdiction and even if that happens, defendants would need a presence (either personal or assets) in a jurisdiction for judgment to be enforced against them. The author does not, however, address the possibility of having judgments enforced against the defendant in another jurisdiction.

rights to interpret national patent legislation.<sup>43</sup> In the absence of a more uniform approach to jurisdiction, predictability and fairness will be undermined. The dangers of national courts applying jurisdictional rules in isolation of each other was long ago noted by Akehurst: “[t]he rules of private international law adopted by one country are unlikely to be satisfactory if are adopted without paying attention to the rules adopted by other countries. . . [P]rivate international law will develop in different directions along increasingly divergent lines. Such attitudes will also obstruct the unification of private international law by treaty.”<sup>44</sup> In both the short and long term, the integrity of national and international patent laws depends on inter-state coordination.

## V. CONCLUSION

The territorial nexus between infringing activity involving a foreign element and the application of national patent law has proven elusive in telecommunications cases. Heretofore, territoriality has been connected to elements in an infringement action in a manner that defies coherence. This paper has proposed the following principle of territorial market rights to guide national courts in determining whether to apply national patent law to transnational patent disputes concerning telecommunications: “that states should apply their patent law to infringement cases involving a foreign element to the extent that market rights pursuant to a patent grant have been commercially exploited, either directly or indirectly, within that state.” It has been argued that this principle is fair and predictable to the parties involved, accords most with international patent law, and protects what is most valuable to the patent system and patent holders.

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43. STRAUSS, *supra* note 26, at 428.

44. AKEHURST, *supra* note 32, at 111.